

U.S. Department of Transportation

National Highway Traffic Safety Administration

# **ODI RESUME**

Investigation: PE 12-036

**Date Opened:** 11/16/2012 **Investigator:** Robert Young **Approver:** Frank Borris

Subject: Fuel Leak - Motorcycle

**Date Closed:** 07/22/2013 **Reviewer:** Bruce York-B

### MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** BMW of North America, LLC

**Products:** 2005-8 BMW R-Series

Population: 23,115

Problem Description: Leak from fuel pump outlet moulding

## **FAILURE REPORT SUMMARY**

	ODI	Manufacturer	Total
Complaints:	80	15	95
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0

### **ACTION / SUMMARY INFORMATION**

**Action:** This PE is closed and upgraded to investigation EA13-006.

#### Summary:

Owners of model year (MY) 2005-2008 R-Series motorcycles report substantial, high pressure fuel loss occurring when the fuel pump is energized. Many times they first become aware of the problem when fuel soaks their pant legs or is puddled under their parked motorcycle. The Office of Defects investigation (ODI) has obtained an owner video illustrating the issue. This video, and other material, may be found in the public file at www.SaferCar.gov.

ODI has learned that the subject fuel leak is due to cracks in the fuel outlet quick connector located on the in-tank fuel pump housing.

While some owners, reluctant to incur the expense to replace the fuel pump assembly, have undertaken frequently ineffective do-it-yourself repairs primarily involving adhesive patches, two other remedies are available. The first, found in the after-market, is an aluminum clamp designed to reinforce the fuel outlet threaded flange. The second is BMW's own remedy, appearing in early 2011, following introduction of the aftermarket clamp. It, too, involves a metal collar designed to support the fuel outlet threaded flange.

In January 2004 BMW conducted safety recall 04V028 involving 2000 to 2004 Model Year K and R Series motorcycles for a pressurized fuel leak. In this case an O-ring in a fuel line quick connector could become damaged and BMW identified the potential for fire as a consequence of this failure. In its recall, influenced by an ODI investigation (PE03-054), BMW judged the fire risk to be low and the fuel loss to be insignificant -- occurring most often during cold starts -- resulting most often from improper servicing of the fuel line quick connector by its dealers.

All of the complaints and warranty claims referenced in this resume involve verified fuel leaks rather than owners simply expressing a concern that a leak may develop in their subject motorcycle.

With summer approaching and seasonal motorcycle usage increasing, ODI has upgraded PE12-036 to EA13-006 to further evaluate this issue, monitor fuel leak frequency, and determine the risk associated with the alleged fuel leaks.

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The ODI reports cited above can be reviewed at:
http://www-odi.nhtsa.dot.gov/owners/SearchNHTSAID
under the following complaint identification numbers: 540232, 765847, 10074376, 10159252, 10236289, 10339245,
10356156, 10417320, 10425962, 10430734, 10430822, 10432269, 10433589, 10433733, 10436885, 10437222,
10442023, 10443840, 10444670, 10444742, 10444876, 10445888, 10445954, 10448104, 10448104, 10448325,
10448592, 10449393, 10451907, 10452476, 10453738, 10460566, 10463408, 10463946, 10467136, 10470251,
10471518, 10471642, 10474390, 10475150, 10474390, 10475150, 10480052, 10480834, 10485274, 10485276,
10485292, 10485337, 10485348, 10485351, 10485376, 10485434, 10485452, 10485783, 10485789, 10485796,
10485807, 10485882, 10487501, 10487624, 10488652, 10488899, 10490417, 10490868, 10491835, 10492118,
10492342, 10492961, 10493015, 10493320, 10494927, 10494899, 10495307, 10496593, 10503488, 10503806,
10504130, 10504324, 10508135, 10508150

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